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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,404	10/27/2000	Uwe Schumann	BEIERSDORF 661-WCG	5395

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EXAMINER

CHAN, SING P

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/698,404

Applicant(s)

SCHUMANN ET AL.

Examiner

Sing P Chan

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shumann et al (U.s. 6,129,983) in view of Cotsakis et al (U.S. 5,686,179).

Regarding claim 1, Schumann et al discloses a self-adhesive tape. The adhesive tape is formed by using a two-part polyurethane composition comprising an isocyanate and a polyol. (Col 2, lines 21-38) The mixture is mixed in a planetary mixer and the mixture is cast on to cured adhesive composition on release paper or release film and is cured by passing the laminate through the drying tunnel at a constant speed. (Col 3, line 65 to Col 4, line 12) Schumann et al does not disclose mixing the components continuously, continuously applying the mixture to the release paper, and rolling the laminate at a winding station. However, mixing the components continuously, applying the mixture to the release paper, and rolling the laminate at a winding station is well known and conventional as shown for example by Cotsakis et al. Cotaskis et al discloses a method of forming a pressure sensitive tape. The method includes mixing the components in a continuous mixing extruder, continuous applying the mixture to the

release paper, curing the mixture in a continuous oven, rolling the adhesive tape onto a tape core to form a tape roll. (Col 3, lines 37-61)

It would have been obvious to one skilled in the art at the time the invention was made to continuously mix the components in a continuous mixer, continuously applying the mixture to the backing material, curing the mixture in a continuous oven, rolling the adhesive tape onto a tape core to form a tape roll as disclosed by Cotaskis et al in the method of Schumann et al to form the tape efficiently, quickly, and with high output.

Regarding claims 2 and 3, Schumann et al discloses a second backing material with cured adhesive composition on the release paper or release film is applied to the first backing material. (Col 4, lines 4-8)

Regarding claim 4, Schumann et al discloses additive can be added to the polyurethane mixture; materials such as dye, (Col 3, lines 5-11) catalysts, (Col 2, line 53) and other additives. (Col 3, lines 24-31)

Regarding claim 5, Schumann et al discloses the polyurethane mixture is positioned on the adhesive layer on the release paper or release film. (Col 3, line 65 to Col 4, line 6)

Regarding claim 6, Schumann et al discloses the backing is a dehesive media. (Col 3, lines 65-67)

Regarding claim 7, Schumann et al discloses a double-sided self-adhesive tape. (Col 4, lines 13-18)

Regarding claim 8, Schumann et al discloses the dehesive media are release paper or release film. (Col 3, lines 65-67)

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schumann et al (U.S. 6,129,983) in view of the Cotsakis et al (U.S. 5,686,179) as applied to claim 6, and further in view of the admitted prior art.

Schumann et al as modified above is silent as to the dehesive media can also include woven, non-woven, and elastomer. However, it is well known and conventional to use backing that include woven, non-woven, and elastomer as shown for example by the admitted prior art. The admitted prior art discloses backing material include all material in web form such as woven, non-woven, and elastomers and the coating of these web form backing is well established for making self-adhesive articles. (See specification, page 1, lines 33-35 and page 2, lines 28-29)

Response to Arguments

4. Applicant's arguments filed December 31, 2003 have been fully considered but they are not persuasive.

5. In response to applicant's argument that Cotsakis is not a continuous process. The examiner considers the use of the continuous mixer extruder to mix the components a continuous process and the process of preparing the base polymer mix as a batch process, which one in the art would prepare the base polymer mix in sufficient amount to allow a continuous process of mixing and forming the tape.

6. In response to applicant's argument that Cotsakis does not disclose using forming a polyurethane backing and do not apply a backing to an adhesive layer. The examiner relied on Cotsakis to provide the teaching of a continuous process of forming a tape. The teaching for the formation of polyurethane backing and applying the

Art Unit: 1734

backing to an adhesive layer is provided by Schumann et al. The combination of Schumann et al and Cotsakis discloses the instant invention.

7. In response to applicant's argument that Cotsakis teaches rolls up uncured single-layered tape. The examiner relied on Cotsakis to provide the teaching of rolling up the backing of the tape after a curing step, and Schumann et al to provide the teaching of curing the polyurethane backing through a drying tunnel. The combination of Schumann et al and Cotsakis provided the teaching of rolling up the tape after the curing step of the polyurethane backing.

8. In response to applicant's argument that no person skilled in the art would ever combine the references, the examiner relied on Schumann et al to provide the teaching of forming a polyurethane backing and Cotsakis to provide the teaching of forming a tape backing with a continuous mixing and coating process. One skilled in the art would consider two in the same field of endeavor such as forming tape backing and would combine them.

9. In response to applicant's argument that Schumann et al cures and stores his polyurethane backing for one week before applying the adhesive. Schumann et al discloses this process as an additional embodiment where the preferred process is to apply the adhesive onto release paper and dried, coating the polyurethane mixture directly onto the adhesive composition, and curing and drying the polyurethane composition. (Col 8, lines 18-31)

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P Chan whose telephone number is 571-272-1225. The examiner can normally be reached on Monday-Friday 7:30AM-11:15AM and 12:15PM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1734

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chan Sing Po
spc

Richard Crispino
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